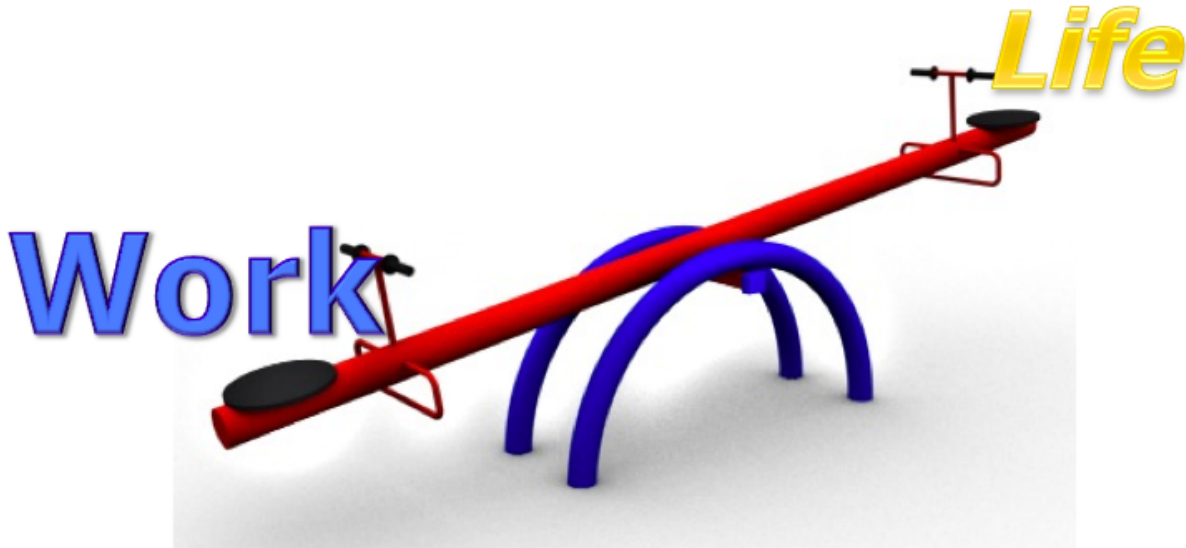


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Balancing Work and Life

Keynote presentation presented by Jennifer West at the 2011 NSF ADVANCE Workshop: Negotiating the Ideal Faculty Position, A Workshop for Underrepresented PhDs and Postdocs in Science, Engineering and Psychology September 18-20, 2011

Balancing Work and Life



Take care of yourself

- Stay healthy
 - Eat right, exercise, have a hobby, etc.
- Make time for things you enjoy
 - Music, sports, reading
- Spend time with family and friends

Create a Support Structure

- Accept less than perfection
 - Cleanliness, simple meals, etc.

- Hire a housekeeper
- Plan to do shopping and chores on a schedule
 - Less frequent will give you more time
- Expect your partner/spouse/roommate to share in household responsibilities
 - Delegate tasks to others

Use Available Resources

- Take advantage of childcare, backup childcare, summer camp, etc.
- Lose the guilt
 - Understand limitations
 - Be realistic
 - Don't make comparisons with others
 - Accept your own work style, whatever it is
 - 8-5 PM regularly
 - 3-day post-procrastination binge

Balance in the Workplace

- Learn to say “NO” but do it nicely!
- Never commit immediately
 - Take time to consider requests
- Ask yourself
 - Is this work important?
 - Do I care about this task?
 - Will this effort help me in the future

Prioritize What You Do

- Will this help my students?
- Will this get me tenure?
- Will this advance me professionally outside my institution?
- Will this interfere with something that I care more about?

Convey your priorities clearly to others

When You Say “Yes”.....

- Follow through
- Give your time to the process
- Put energy into the efforts
- Bring your conviction to what you have agreed to do
- Be present to the process and enjoy the moments
- What will you “not do” in order to do this?

Talking Points

You will want to meet with graduate students to assess the quality of the program.

If Practical, Say “Yes” to....

- Panel Service
 - NSF, NIH, NASA, DOE, others
 - Do this at least once as early as possible in your tenure clock (ask for help to get on a panel)
- Reviews of manuscripts and proposals
 - Do not do more than 12 reviews total per year (*count any panel service*)

General Rules

- If something can be done in 5 minutes
 - Do it now
 - Be done with it!
- Make realistic to-do lists and track them
 - List by date due and importance
- Don't procrastinate
 - It only makes things harder
 - Limited time requires great focus

Use Your Resources

- Use available secretarial support
 - Don't make photocopies
 - Delegate any grant paper work possible
 - Delegate travel arrangements, other scheduling
- Use TAs if available
 - Think about what you want them to do
 - Leverage their time and yours

Managing Children

- Take advantage of all family leave/tenure clock delay policies
- Find effective and reliable day-care
- Find sick-child services (some institutions provide support)
- Find a community of parents with children of similar age
- Hire a sitter when you need time away
- Spend quality time with your child
 - Let go of thinking about all the other things you need to do
 - Let go of guilt that you are not “there” all the time

- Find ways to bring your child into your work world
 - Time in the office (have things for them there)

Traveling with Children

- Travel is easier with babies and with older children
 - Travel when you don't have children
- Understand the resources available for childcare at meetings
- Work with your partner to time travel effectively

General Strategies

- Set regular (weekly?) meeting times with your graduate students/undergraduate research students/postdocs
- Set times to write in a setting that is uninterrupted (target when you are most productive)

Talking Points

Provide lists of questions.

Strategies for “Think Time”

- Find alternate places to work
 - Internet café, park with tables, etc.
- Educate family, friends, significant others, and students the demands and your work style
 - Some may not understand academia or tenure
 - Some may not know how you need to work toward your goals

- Set a specific time to read email, rather than reading as they come in

The People in Your Life

- Think about all those individuals in your life play an important role in helping you find balance
 - Inform them what is happening for you
 - Ask them for help when you need it
 - Offer help when you have the opportunity
- These individuals can help balance your life
 - Keep them fully on board with what is going on

Remember...

- It is not possible to get EVERYTHING DONE!
 - Prioritize and set your standard to match the task
- No one is perfect!!
- At some point you will feel
 - Incompetent (as a PI/spouse/parent/partner/child)
 - Disorganized
 - Overwhelmed
 - Unable to cope

Talking Points

If your work is in two very different areas, work with your mentor(s) to craft a talk that integrates, to the degree possible, what you have done. Focus most on the work that you will build on for the future and what aligns best with the department where you are interviewing (which may mean

having to prepare multiple talks to match the relevant department's interests).

If your work is based on something done by a collaborator, acknowledge that by saying "Research by my collaborator demonstrated that..., and based on that, I designed the following set of experiments..."

You Will Wonder...

- How to get it all done.
- Whether you *can* get it all done.
- If it is all worth it.
- If you are alone.....
 - YOU ARE NOT ALONE!

When That Happens...

- Take time to regroup
- Talk with people that you trust
- Get some sleep
- Go for a walk
- Meditate
- Regain your balance
- Spend time on what you most enjoy

Talking Points

If you don't know how to target your talk to the level of the audience, talk with your mentor and colleagues. Ask the Department where you are interviewing who will be in the audience. A talk to primarily faculty and postdocs will be different from one that has upper level undergraduates and beginning graduate students, for example.

And Then.....

- Do what needs to be done!
- (And remember how hard it is for your students who have children...)

What are search committees looking for?

Panel discussion presented by Seiichi Matsuda and Amina Qutub at the 2011 NSF ADVANCE Workshop: Negotiating the Ideal Faculty Position, A Workshop for Underrepresented PhDs and Postdocs in Science, Engineering and Psychology September 18-20, 2010

What Are You Looking For?

- What type of institution? Research-1? Teaching?
- Does it matter to you?
- What parts of the country appeal to you?

Think carefully about whether you would really go to a place *before* you apply. Think through your personal priorities and let them guide you.

Talking Points

Recruiting is time-consuming and expensive on both ends, so consider whether you really want to apply according to your personal priorities.

Interviewing is hard on both sides, and the investment of time, energy, and resources demands thoughtful preparation. If you accept an interview, do everything possible to ensure that you do your best.

What is the Department Seeking?

- The advertisement may be focused in a specific area. Does it overlap your expertise?
 - If there is a question, address that issue in the application.
- The department may provide information in the advertisement, but peruse their website for deeper, more detailed information.

Talking Points

If you know someone at the institution of interest, you can inquire about what the department is seeking. Remember always to follow the instructions in the advertisement for the position. Remember that the goal of the institution is to recruit the BEST POSSIBLE PERSON.

Applying for a Position

- “Cold” applications
 - Usually need to have connections to the department
- Responding to an advertisement
 - Consider level and areas requested
- Solicited applications
 - Be sure to present at the most relevant conferences. Hopefully this visibility will lead to contacts with hiring departments.

The Department’s Timeline

- Timelines vary significant between disciplines and between schools
- Be alert to the advertisement pattern in schools in which you are interested
 - Some departments move quickly and make a rapid offer with a short timeline
 - Some departments gather a deeper pool and move deliberately through their candidate list.

Talking Points

If you know someone at the institution of interest, you can inquire about the timeline for a particular department.

The Application (1)

- Cover letter
 - Offers an opportunity to create interest in you
 - Summarizes your qualifications and interests
- Curriculum vitae (Well organized! Error free!)
 - Education, honors/awards, grants, summary of research experience, publications, invited talks, abstracts, oral presentations, teaching experience, service activities, any other pertinent information
 - Some institutions may request copies of reprints of your work

Talking Points

The format for a CV varies significantly between fields — ask several people that you trust to review your CV and other materials.

The Application (2)

- Summary of research accomplishments and research goals (length often specified)
- Summary of your teaching interests and experiences (length often specified)

If the length of these documents is not specified, be sure to include a brief, well-articulated summary at the beginning of each document — some reviewers may not read the entire document, others will want more.

THESE DOCUMENTS ARE CRITICALLY IMPORTANT

Talking Points

Instructions from the department may include other items. Information on research experience/goals and teaching experience are key, and including invited talks conveys demonstrated interest by colleagues in the area of your work.

The Application (3)

- Letters of recommendation
 - KEY ELEMENT
 - Number ranges from approximately 3-5
 - Remember that these individuals will have to write for every application you submit.
- Some departments will ask you to provide the names, others will ask that you solicit the references to send the letters.
 - Timing of the letters varies — some ask for the letters from the beginning, others later in the process

The Application (4)

Writers of letters of recommendation

- Critical that letters come from someone who knows you well.
- Status of the person matters, but if they cannot speak knowledgeably about you the letter will be discounted.
- May be particularly helpful where publication record is low — and the reference can provide perspective (e.g., started a new area and work is just emerging).

Talking Points

Apocryphal story: Nobel Laureate wrote: “This is the best student I’ve ever had; if you don’t hire this person, I will have no respect for you or your department.” Most letters with no information hold little sway, but this individual was highly influential in the field and was known not to make such statements lightly. Most letters are more detailed, providing thoughtful commentary on your body of work and your professional style.

Research Statement

- Remember that the search committee members may be in areas peripheral to your research
- Describe two or three research proposals
 - Usually one that is related to your prior work that is clearly feasible
 - One or two projects that demonstrate your ability to think beyond your current work

Talking Points

Audience, particularly in interdisciplinary areas, can be quite varied in terms of background. Craft a message that is understood by readers from distinct backgrounds. In fields where research is a team effort, you have to acknowledge your collaborators while differentiating your key and important contributions to your work. Talk with your mentor(s) about strategies for presenting your work in the context of a team effort. Women are often less clear about their accomplishments and less willing to take credit for what they have done. Play to your strengths within your cultural context.

What to Include?

- Statement of the problem
 - Key unanswered questions in field

- How will your work contribute?
- Description of research plans
 - Break into specific aims
 - Include figures
 - Be both creative and realistic- mix of high-likelihood and high-reward projects
- Show how it will be possible to get grants in this research area

Talking Points

Readers have many demands on their time, and they may stop reading or read only part of the document. Have the important, exciting elements in a summary at the beginning. You need to provide the story of where you have been (~25%), where you are (~30%), and where you are going (~45%). The percentages are illustrations just to remind not to dwell too much about where you were multiple years ago, to be clear about your current accomplishments, and to be very, very clear about where the past/present lead you for the future. Generally “stay out of the weeds” unless the design/details are critical to understanding.

What to Avoid?

- If you proposed work is too close to an advisor’s area, you may be too much in their “shade.”
 - Talk with your advisor so that you understand one another’s plans/directions.
- Proposing work in which you have no experience is risky.

Teaching Statement

- Describe your philosophy towards teaching and experiences that led to this perspective.
- Discuss courses within the core curriculum that you could teach.
- Propose new courses that might be developed in the future that you could teach.

What to Emphasize in your Application?

- Find out about the department/school
 - Importance of teaching vs. research
 - Areas of interest/growth
- May want to customize your application materials for different positions
- Brag about your successes (within reason)!

What is Makes an Application Stand Out?

- Varies between departments/institutions
- Strong publication record
 - Most important factor!
- Exciting research plan
 - Creative and innovative while also feasible
- Great reference letters
 - Evidence of innovation, creativity, hard work, etc.
- Interesting and innovative teaching plans
 - Highlight your experiences and capabilities
- Other experiences

- Experience writing a grant, etc.

What Happens Next?

- Generally administrative staff do not review applications
 - Primarily a faculty effort in which a subset of search committee will read an application
- Faculty committee (sometimes full faculty) will select candidates for interview (often 3-6 out of 100-200 applicants)

What Are Search Committees Seeking?

- Educational institutions, degrees, honors
- Publication record (suggests potential trajectory)
- Teaching potential that matches need
- Positive perceptions of references
- Research area that “fits” with departmental goals
 - May match already existing, may open new areas

What Makes Application Stand out?

- Perception of excellence by wide spectrum of reviewing faculty
- Effective organization that clearly conveys:
 - Strong research accomplishments
 - Well-written and exciting research plan
- Exciting vision of teaching
- Research that integrates into the department

Recommended Reading

- Making the Right Moves: A Practical Guide to Scientific Management for Postdocs and New Faculty
 - Howard Hughes Medical Institute
- At the Helm: A Laboratory Navigator
 - Kathy Barker, Cold Spring Harbor Press

Finding the right institutional fit

Panel discussion presented by Rob Griffen and Jennifer Rudgers at the 2011 NSF ADVANCE Workshop: Negotiating the Ideal Faculty Position, A Workshop for Underrepresented PhDs and Postdocs in Science, Engineering and Psychology September 18-20, 2010

What Do YOU Want?

- Do you want a strong sense of community and mentoring?
- Do you want to be able to “do your own thing” without much interference?
- What do you expect in terms of the graduate student community?
- Do you want a department that values postdocs?
- Think carefully about what you want and then formulate your process of preparation and interviewing
 - Ask the questions that matter to YOU
 - Engage faculty in the manner that YOU wish to be engaged (but always be polite!)
 - Demonstrate in your interactions the style that you will use as a faculty member

Prioritize Your “Wants” and Know When to Ask

Know what is important before your visit

- Teaching load/teaching assistants – interview
 - Level, size of class, length of assignment
- Mentoring programs (formal/informal) – interview
 - Ask assistant professors about mentoring received
 - Ask Chair about mentoring policies/procedures
- Tenure expectations –balance of research/ teaching/service
- Good work/life balance

- Department confidentiality

What Are Your Key Issues?

- Location – city central/rural
- Colleagues in your area or related areas
- Geographic area
- Type of institution
 - Research intensive
 - Combined research/teaching
 - Teaching intensive with some research

Ways to Get Information

Internet

- Search the department, school/college, institution
- Look at the faculty pages
- Look at the HR pages
- Find community pages
 - Weather, special events, features of the area
- Look for features of the institution and community that are important to you
- What is the distribution of faculty in the department?
- Would you be the only assistant professor?
- What does that mean?
- Are others who do research (either in your department or others) related to your own work?

Examine Websites for Resources

- What tangible resources are present in your department?
 - Shared equipment, shared computing, etc.

- Do courses have graduate teaching assistants?
 - You can find out more on an interview
- What support is provided by the human resources department/division/organization

Policies for the Organization

- Many policies of interest are on-line, both institutional and departmental
- Almost all institutions have a Human Resources webpage that gives policy information
- Promotion and Tenure information
 - Also explore feedback before the P & T decision-making process

Talking Points

Audience, particularly in interdisciplinary areas, can be quite varied in terms of background. Craft a message that is understood by readers from distinct backgrounds. In fields where research is a team effort, you have to acknowledge your collaborators while differentiating your key and important contributions to your work. Talk with your mentor(s) about strategies for presenting your work in the context of a team effort. Women are often less clear about their accomplishments and less willing to take credit for what they have done. Play to your strengths within your cultural context.

Human Resources

- Contact the HR organization and ask your questions if information is not on-line
 - You don't have to identify yourself

- Prepare ahead of time to formulate your questions clearly
- Ask about resources for new faculty, partner placement, health insurance, retirement, family leave policy, anything that matters to you

Asking Questions at the Interview

Carefully plan the questions to ask

- You don't want to offend your hosts
 - Be polite, calm, and friendly
- You DO want to get the information
 - Be curious, not demanding
 - Repeat questions, but only a few questions with everyone, to get an integrated view
- Be sure to ask the Chair and/or Dean, as appropriate all the questions that are most critical for you

A Good Chair?

- Will know what you are likely to need
 - For your own use, for access to equipment
- Will have your needs in mind
- Will explain what is available and how to get access to what you need
- Will give information about the graduate program and will arrange time with graduate students

Resource Issues

If a critical resource is not present, plan carefully how to inquire about this issue with the Chair/Dean/Faculty

- Equipment – will the start-up package provide what you need for your work?
- Shared equipment – where is the ancillary equipment you need available?

Talking Points

Apocryphal story: Nobel Laureate wrote: “This is the best student I’ve ever had; if you don’t hire this person, I will have no respect for you or your department.” Most letters with no information hold little sway, but this individual was highly influential in the field and was known not to make such statements lightly. Most letters are more detailed, providing thoughtful commentary on your body of work and your professional style.

Questions for Faculty

- Ask a limited set of questions consistently
 - Gives you a sense of the culture
 - Allows you to see what may be “on the books” but does not happen
- Ask about the seminar program
 - Provides opportunity for interaction with leading scholars that may write a tenure letter
 - Does the department encourage junior faculty involvement?
- Ask about mentoring programs?
 - Find out *carefully* from junior faculty if they work

Resource Issues

- Other questions to explore gently with faculty and with students

- What is support for graduate students?
- Are there travel funds for graduate students?
- How do the students interact across labs?
- Gather information with finesse and without evident judgment on what the department does
- What is “on the books” but does not happen?

Culture of the Department

- Be sensitive to the “unspoken” issues that will be evident in attitude/style
- Ask “innocuous” questions, particularly of the students, designed to garner a sense of their collegial spirit
 - Is there a place the graduate students go have a beer on Fridays?
 - Our department has a retreat each year, and I was wondering if you do as well.
 - Riskier, but informative: Ask student Y to tell you what student X does in the lab.
- Attend to the non-verbal messages
 - What feeling do you get from each encounter?
 - Is your gut screaming? If so, listen to it, but don’t manifest that response.
 - Do you get a sense of empathy/moral support in the department? Is that important to you?

Two-Body Challenge

- When do you indicate that you have a partner who also needs a job? Choices:
 - On your application – probably not the best time
 - In the interview – very helpful to the Chair who wants to recruit you, as it gives time to do the legwork necessary

- After the offer – if the institution knows they cannot provide a second position or takes significant time to figure that out, both they and you are negatively impacted by the delay
- Impacts differ depending on circumstance
 - Large city, easily employable partner = minimal problem
 - Large city, multiple universities = medium problem
 - Small community and/or smaller institution, partner in same (or even different) department = larger challenge for institution
- It is easier to deal with the challenge sooner rather than later, but you may want the Department to know you and *want* you before you raise the issue
- If your partner is already known in the intellectual community, the department may already know that there is a two-body challenge
 - Remember it is a very small world
 - Don't be purposely deceptive, but DO choose the timing for discussing this issue thoughtfully
 - Be aware that some faculty (or graduate students or sometimes even Chairs) will ask you about this issue, despite the fact that it is illegal to do so. Have a prepared response.

Dealing with the Information

What do you do if the one offer you receive is not compatible with something you care about?

- You love to ski, and the offer is in Florida
- Think globally about what you are doing
 - Can you find ways to schedule your activities that bring together what you have available professionally and what you need personally?

Have a Positive Attitude

Even if you have qualms about a department, be positive!

- Faculty may someday write your tenure letters
- Graduate students choose post-doctoral advisors
- You never know when your path will cross again in an important way with someone in the department

Department Personality

Every Department has a personality

- Pay attention carefully to pick up the underlying sense of the Department
- Listen to your “gut” and how it feels within that setting
 - Remember to set-aside your own issues and nervousness and pay attention to the Department
- When you come away from the process, relax a little, how do you feel about the Department? Write down your thoughts

Deciding

- Review your options in the context of your values
- Imagine yourself as part of the Department, part of the community, living in that setting
- Talk to your colleagues, your friends, your family, those that know you best and share your process — use their feedback in making the decision

Living with Your Decision

- Whatever your decision, go into the position with a positive attitude
- Seek out mentors (even if the Department has a mentoring program) and interact with them
- Find effective colleagues both inside and outside your Department and engage them

- Find the things that you ENJOY in the community and DO THEM!

How to stand out in the interview

Panel discussion presented by Qilin Li and Fred Oswald at the 2011 NSF ADVANCE Workshop: Negotiating the Ideal Faculty Position, A Workshop for Underrepresented PhDs and Postdocs in Science, Engineering and Psychology September 18-20, 2010

Interviews Are a Grueling Process

- Hard for both interviewee and interviewers
 - Time, energy, interaction, evaluation on both sides
- Department wants to know if you are right for them
- You want to know if department is right for you

Short Time Frame

- Will interact with a number of people
 - Short, intense period
- Want to stand out — in a really positive way
- ALWAYS BE “ON”!!!
 - Even in casual meal sessions, you are being evaluated and judged
 - Do not “let down” at any time during the process

How Do You Present Yourself?

- Handshake is important first impression
 - Firm, but real (really shake the hand!)
 - Not too firm — may hurt!
- Your level of interest and information is important
 - Gather information about the department (more later)

- Gather information about the institution (more later)

The Campus Visit

- Most important step in determining whether interview becomes an offer
 - Remember that not everyone you meet will have “studied” your application
- Allows you to interact with those who will make the offer decision
 - Varies between institutions (full professors, entire department, role of dean/provost)

Before the Visit

- Learn about the institution/department/faculty
 - Web pages are a wonderful resource, including family leave and P&T information
 - Ask colleagues who may know someone there
 - Ask for a copy of the department’s strategic plan (not having one tells you something!), the school or college’s plan, the institution’s plan
- Agenda for your visit
 - Ask for the agenda a little before your visit
 - Prepare for those people on the agenda, but realize that agendas change, so know something about the entire department
 - If you don’t get the agenda before you arrive, that tells you something!
 - Ask for 30 minutes of preparation before your seminar
 - Ask to meet with graduate students
- Think about what you will wear

- Clothes should be comfortable for you (but not too informal) and make you feel like you look good
- You will be wearing them for the entire day
- Do **not** wear clothes that make you look like you are a graduate student or on a date
- Think about what you will carry with you
 - You'll be lugging it with you for the entire visit

Talking Points

You will want to meet with graduate students to assess the quality of the program.

What Happens on the Visit?

- Formal presentations: Exude confidence!
 - Departmental seminar
 - Presentation on your research plans
 - May vary among fields
- Visits one-on-one with faculty, chair, sometimes dean or provost
 - For these shorter visits, an “elevator” speech that summarizes your work is important
 - Practice this with friends before interviewing
 - Have questions prepared to fill the time

The Visit

- Interview visits are a marathon event

- Do your homework
 - Research area, role in the department
 - Ask Chair and others about research areas prioritized for the future
- Ask individuals you see about their teaching, what the courses are and how the students are
 - Ask Chair about anticipated future teaching needs of the Department
- Ask the same questions, as appropriate, of everyone on your schedule
 - Consistency or lack thereof is information
- Ask about the promotion and tenure process and criteria
- Ask about expectations for generating extramural research support and supporting graduate students
- Ask about the teaching load

Your Technical Presentation

- Consider the audience
 - Faculty in your area, faculty outside your area, graduate students, undergraduates
 - The people making the decision
- Who is most important?
 - THE PEOPLE MAKING THE DECISION!!

TARGET THE PEOPLE MAKING THE DECISION!!

- Target the introduction (first 10 min) to the entire audience

- Convey excitement about what you are doing and create excitement in your listeners
- Ensure understanding the importance of the work and the key background concept
- Target the heart of the seminar (next 25-35 min) to the decision-makers
 - Be exceptionally clear (but not simplistic)
 - Tell them what it means, and summarize as you go
 - Establish your expertise in the area
- Target the conclusion (last 10 min) to the entire audience
 - What does your work mean to the future of the field?
 - What direction are you taking the work next?
 - This anticipates your more detailed talk about future work
 - Leave the audience feeling a sense of excitement about the future of your area and your ability to contribute
- Be sure to acknowledge colleagues/funders

Talking Points

If your work is in two very different areas, work with your mentor(s) to craft a talk that integrates, to the degree possible, what you have done. Focus most on the work that you will build on for the future and what aligns best with the department where you are interviewing (which may mean having to prepare multiple talks to match the relevant department's interests).

If your work is based on something done by a collaborator, acknowledge that by saying "Research by my collaborator demonstrated that..., and based on that, I designed the following set of experiments..."

Your Research Presentation

Align the talk with your research write-up, which many faculty will have read

Think about your audience

- Is there anything you don't want to share for reasons of being "scooped"? Generally, it's best to say what you are thinking, but worth considering your audience
- What background do you need to provide so that they understand your planned experiments?

General Advice

- Make clean slides, no typos, readable font
- Reference work appropriately
- Provide an outline and follow it
- REHEARSE your talk!!!! Get feedback from a knowledgeable audience!
 - Is the level placed well for your audience? Are you conveying what you wish?
 - Get them to ask questions!!!
- Go to the room and check out the projector to ensure it works with your computer or flash drive or CD.
 - Hard to recover if you don't have slides
- Have a well-practiced (and therefore familiar) beginning
- Say "Thank you, I'd be happy to answer any questions" at the end.

Talking Points

If you don't know how to target your talk to the level of the audience, talk with your mentor and colleagues. Ask the Department where you are interviewing who will be in the audience. A talk to primarily faculty and postdocs will be different from one that has upper level undergraduates and beginning graduate students, for example.

Answering Questions

- If someone challenges you....stay calm
 - Acknowledge the question
 - Validate it as appropriate or even, if not, say how you have thought about its relevance
 - DO NOT BE DEFENSIVE
 - If you have not thought about it or don't know what the person is talking about, suggest that you would like to talk with the person individually after the talk on this topic
- Think about the question(s) you *really don't* want to be asked
 - They will be asked
 - Be prepared to provide an answer
- Don't over-answer – be concise and clear in your responses

Talking Points

Provide list of questions.

Deflecting “Tests”

Expect the unexpected

- If someone asks you to “solve” an equation or do something in his/her office... indicate that you have a limited amount of time together and you’d be happy to talk with them further on the issue, but would like to focus on other things in the time available

Talking Points

If you have to use this approach, be thinking in the back of your mind how you will pursue the discussion. Draw the person who asked the question out and get them to help in formulating the answer in an interactive way. Be sure to say how much you appreciate the question.

The Visit

- Ask about impact of recession on the institution, on the department
- If you get different answers from different people, ask the Chair to clarify the situation

What To Do When...

- Someone asks a question forbidden by law (e.g., Are you married? Do you have children?)
- Possible responses
 - Refocus (e.g., “My husband’s job is very portable”)
 - Follow up with a question of your own (“Can you tell me something about relationships between the department and industry in this area?”)
 - Indicate that you would prefer not to answer
 - Note that the question is outside the boundaries you understand for this process... and many more options
- You feel uncomfortable with the situation...

- Refocus what is happening by asking a question in a different direction or move away with murmured good wishes if that option exists
- Pull someone else into the conversation
- Excuse yourself to go to the restroom

Talking Points

Participants ALWAYS bring up this question. Answer in a way that you feel comfortable, but indicate that there are many ways to respond — either answer the question directly, deflect the question, don't answer, challenge the person... the individual has to come up with something with which they are at ease, and in that case it is likely that the questioner will also be at ease.

Ending the Process

- Thank the Chair (or person with whom you end the process) for their time, the information, and their input.
- Some candidate write brief emails to the individuals they met during the interview (not clear whether this is a good idea or not, so do what feels right to you).

Relax and Enjoy the Process

- Relaxing is not easy, but you will perform better and be more effective if you have a level of calm and your wits about you
- If you can't enjoy the process, try to be present to what is happening (not just responding) and learn from the process

GOOD LUCK!!!!

Teaching Your First Course

Monday lunch presentation presented by Yousif Shamo at the 2011 NSF ADVANCE Workshop: Negotiating the Ideal Faculty Position, A Workshop for Underrepresented PhDs and Postdocs in Science, Engineering and Psychology September 18-20, 2011

Why Do We Teach?

- So that individuals *learn*
- To convey the excitement of our intellectual area
- To capture interest and imagination
- To ensure deep understanding
- To share our own research efforts

Who Do We Teach?

- Undergraduates (focus for today)
 - Majors
 - Non-majors
- Graduate Students (focus)/Post-docs
- Colleagues
- Your chair, your dean
- The public
- Program managers/patent office/others

Remember...

- Developing a good course takes time
 - Learn good time management
- What students learn is *less* than what you teach
 - Don't just try to cover the material

- Understand different learning styles
 - Students have different ways of learning
 - Use the resources you have available
 - Be aware of accessibility requirements

What Is the Nature of Your Course?

- Large/medium/small enrollment?
- Lecture-type classroom or smaller more intimate setting?
- Majors? Upper level or lower level?
- Non-majors?

Note: Styles for these different types of courses are quite different!

Think About “Active Learning”

- Traditional/passive learning = lectures + exams
- Student-centered, active learning can include (among many possibilities):
 - Use of I-Clickers
 - On-line quizzes
 - 1-2 minute papers
 - Student discussion and reporting
 - Projects

Find Out About Resources

- Are I-Clickers available?
- What support for teaching is available?
- Are there faculty groups to discuss teaching?
- Are there on-line resources in your area for student-centered learning?

- Are there sessions at professional meetings or specific meetings relevant to your area?
 - Will your Chair pay for you to attend?

Know About Yourself

- If you are asked what you'd like to teach...
 - Do you really love a big lecture setting?
 - Does a small group setting elicit a sense of excitement or a sense of dread?
- You may not have the opportunity to choose, but knowing what attracts you (and why) may help in dealing with your teaching assignment

Preparation is Key

- Plan for 6-8 hours of preparation per class session the first year
- Get notes from the previous lecturer, but make the course your own
- Be familiar with the material (rehearse a lecture beforehand if you need to)
- Don't wait until the last minute
 - Not much room to improvise
 - May be easier in smaller classes

Do's and Do Not's

- Do not expect perfection
- Do not expect eager, listening faces
- Do learn the names of your students if at all possible
- Do get feedback *during* the semester
 - You can adjust accordingly

- Do work the problems yourself
 - Texts have typos and errors – read the text

Think Very Carefully About Your Syllabus

- Textbook information
- Policies/Grading information
 - What makes up the grade? Is there a curve?
 - Are there make-up exams?
 - Don't change point assignments mid-semester — stick with the syllabus
 - Think through the grading scheme — they'll ask, so you might as well be ready!

Don't Make Exceptions

- If you make an exception for an individual, it will be an exception for the entire course
- Do you allow —
 - Regrading?
 - Late tests? If not, how is grade determined if student was ill/had a death in family?

Finding Your Style

- Adopt a preparation style that suits you
 - If you over-prepare, limit the time by doing it closer to the class
 - If you are anxious, prepare ahead of time but “budget” the time you spend
- Adopt a lecture style that suits you
 - Lots of PowerPoint slides with detail — give students a copy

- An outline that you fill in

What You Project Matters

- Students pick up on your attitude
 - If you care, they will be more respectful and forgiving
 - If you dismiss them, they will reciprocate
 - If you are open, they will engage
 - If you are defensive, they will attack
- Large classes are harder
 - Get to know a subset of the students by name to break down barriers

Challenges for Women

- Openness can be interpreted as being familiar and/or easy
 - Students can try to take advantage in a variety of ways and can impact the class
 - Talking to them privately may work
- Dressing more formally has worked for some women

Find Your Own Style

- Do what makes you feel most comfortable
 - Clothes
 - Presentation style
- Listen to feedback and adjust your style, to the degree you feel comfortable, accordingly

You CANNOT Know Everything

Know that a student *will* ask a question to which you do NOT know the answer

Tell them it's a great question

- Ask them what they think OR
- Assign it as homework OR
- Invite them to come by after class and talk because it's a little off topic for the day OR
- Indicate you don't know, but there are a number of ways to find out
 - Do a web search, find a research article
 - Ask a colleague with expertise

There Will Always Be Someone

- ...who is bored and looks it
- ...who drives you crazy
 - Talking, reading, sleeping, smirking
- ...who questions your authority
 - Directly or indirectly
- ...who does not follow instructions
- ...who simply does not "get it"

Keep your balance, get input, stay steady and get support when you need it!

Issues With Today's Distractions

- Facebook, Twitter, YouTube
 - All compete for your attention and are here to stay; banning computers won't work

- They expect your respect, you have a right to expect theirs
- Find your own comfort level in handling these distractions
 - If they make you less effective, you can simply tell the class, these activities make me less effective and impact everyone

Examinations

- Establish your guidelines (check with your department/institution)
 - Examples: No A/V device (no iphone, no ipods, no headphones, nothing electronic)
- Determine the grading policy
 - Go over it with any graders involved
 - Determine policy/process for re-grades
- Decide whether to provide a complete answer sheet for the examination

Classroom Needs Vary

- Mathematicians use blackboards
- Biologists use Powerpoints
- Chemists and physicists often use classroom demonstrations

Discover the culture of your discipline at your institution and operate within that culture

Ensuring Assignment Reading

- Use on-line quizzes (probably easiest and best)
 - Variety of resources, often campus-specific
- Pose a specific set of questions and assign them to subgroups

- Assign topics to specific individuals

For Smaller Classes

- Class engagement is more feasible
 - Lecture preparation less onerous
 - Case-studies can be used
- Group activities engage everyone
 - Can do some of this in larger classes, too
- Learning to write is important
 - Can use peer as well as instructor feedback

Seeding Discussion

- Have all (or subsets of) students read a specific assignment (often a chapter or a research paper)
- Ask for critiques of the assignment
 - What makes sense, what doesn't
 - Why
- Find ways for students to *engage each other* with your guidance

Evaluations

- Do
 - Think about the feedback
 - Incorporate changes as appropriate
 - Note that *completely opposite* comments will be provided

- “Too much biology, not enough engineering” vs “Too much engineering, not enough biology”
- Don’t
 - Take feedback too personally
 - Try to figure out who said what

After – Recap and Revise

- Fix the lectures/activities that needed the most work first
- Know that you will need to write new exam questions (word gets around)
- Get a teaching mentor and meet ~monthly and go over everything

Time Management/Balance

- Set office hours and keep them
 - Drop-ins can eat away your time
- Try to teach the same course over multiple years
 - Make appropriate adjustments, but minimize preparation time
- Limit undergraduates in your lab to what you can effectively mentor

Find Colleagues for Feedback

- How to deal with absent/failing students
- How to deal with students who are not like you were
- How to recycle quiz/exam questions safely
- How to be appropriately responsive to student requests
- How to protect your time
- How to know what is critical/not critical

Dealing with Teaching Assistants

- Find your comfort level and have a strategy for quality control
 - Can they grade homework? Exams?
 - Can they grade written assignments?
 - Can they convene help sessions?
 - Can they hold office hours?
 - Can they assist in the classroom?
- Can break up assignments based on what you perceive specific individuals can do

Dealing With Parents

- You, for privacy reasons, cannot answer questions from someone other than the student about their performance
- If the student and parent come to see you together, you can provide input and advice about what is happening to the student

Dealing with Cheating

- Ask if your institution has an Honor Code
- Discover your institution's policies on cheating
 - Follow the procedure carefully
 - Decide whether to xerox exams before returning them to prevent changing answers
 - Find avenues that work for you!

Tips From Faculty

- Put office hours right after class
- If you have TAs, direct questions first to them (convey that as you are accessible, but they have to check with the TA first)
- Provide a measured response to emails

- Do not establish high expectations for rapid response (and make longer response times for repeat questions to avoid reinforcement)
- Establish clear criteria for re-grading (exams, homework, etc.)
- Accept that someone(s) will have big problems
- One faculty member had students in a large course write down names of two students in the class to contact with questions before even the TA
- Direct students to a blog site (but you have to monitor to ensure answers are correct)
- Draw clear boundaries
 - Don't instant message
 - Can use Facebook site for the course, not for the instructor (don't "friend" students)
- Use "announcements" for any errors in class
- Know your institutional culture
- "Good" teaching varies with institution
- Ask a lot of questions about expectations
 - From the institutional hierarchy (e.g., P/T)
 - From faculty colleagues
 - From students if you have the opportunity
- "Good enough" is good enough
 - Perfection is probably not an option
- Keep your research effort dynamic and healthy!
- If you get a hard teaching assignment, ask to keep it for multiple years
- Some departments use team teaching
 - Be sure you communicate with your co-teacher and agree on the course design

- Don't negotiate grades — use your best judgment and be prepared to defend it
- Alert students who are at risk of failing
 - Email that says that their standing is well below average and that they should consider getting a lot more help for the class or dropping the class.
- Smaller classes allow more personal interaction with the lagging students
 - The student has to seek/get help
 - Faculty member cannot “fix” the student
- Grading group projects
 - Group grades
 - Each person grades their own work and each person in the group
 - Give them option to report group isn't working and find ways to fix it
- Check copyright policy procedures at your institution before copying copyrighted material

Teaching Can Be Fun!

- Develop a teaching style with which *you* are comfortable
- Be diligent, but don't over-stress
- Seek help/feedback if you run into problems — don't just suffer
- Anticipate future years when you run into students and they thank you for your course and what it did for them!!

Negotiating an Academic Job Offer: What, When, How
Panel discussion presented by Elizabeth Nelson at the 2011 NSF
ADVANCE Workshop: Negotiating the Ideal Faculty Position, A Workshop
for Underrepresented PhDs and Postdocs in Science, Engineering and
Psychology September 18-20, 2010

Finding Out What You Need

Talk with your mentor, colleagues in your department who have just joined, those also interviewing, friends elsewhere...

- Ask about the size range of start-up packages and space
- Find out how they negotiated
- Practice your conversation with them
- Remember that doing this well will be important to getting started effectively
- Ask about teaching loads and salaries

Talking Points

Think of this as the negotiating for something really important to you — who do you know who does this well? Talk with them about strategies.

What Do You Need for Research?

Think carefully before your interview about what you need to do your work — the “start-up” package for research:

- Space/equipment
 - For your own laboratory/office
 - Available to you (shared equipment/core facilities)
- Materials and Supplies/Travel
- People (including you!)

- Graduate students, postdocs, technical assistant
- Anything else that you need for your work

“But I’m not an experimentalist...”

You need a start-up to do your work

- Computer resources
- Office space (and potentially space or access for high-end computing)
- Access to remote facilities
- Teaching support
- Travel funds for you and for students
- Technical support
- Summary salary

Do Your Homework

- Ensure that the pricing you are quoting is current and accurate and for the *specific* item that you wish to acquire
- Make this process a research project and do it as thoroughly as you do your research — it will be with you a *long* time
- Have someone else “vet” your list and help to see if you have left out anything

Get a “REALITY Check”

- Ask your mentor, the department chair, or a faculty member experienced in searches/start-ups to review your list
- Ask them to help categorize items:
 - Essential
 - Important
 - Helpful to the research effort
 - Would be nice
 - Not necessary

Use Planning Time Well

- Start-up is the first experience of the “business-end” of the research enterprise
- Remember that this is *your* research program that you are planning
 - Use this as an opportunity to “hone” your own thinking about your research program
 - Gather as much information as possible in this process

Questions to Ask

Are the funds flexible?

- Funds to support you may come from a variety of sources, some flexible, some not
 - Understand which funds are flexible, which are not
 - Understand the time-frame within which you must spend the funds
 - Some of this may be negotiable, some may not — ask the question
- Funds may be moved from one application to another — ask which funds are “fungible” and which are not.

Remember...

- Start-up packages can vary substantially between institutions
 - Try to target your requests to match what you know about the institutional context
 - Be realistic about what is possible for a given department
 - If you have questions, be sure to ask them up front
- Salary and start-up are almost always separate negotiations — and the funds often come from different “pots”

Space

How do you know if space will work?

- Look at the total square feet
- How is it laid out? Can you imagine/plan your work in that space?
- How close is the space to colleagues of interest to you? To requisite shared equipment?
- Is it near your proposed office? Far away? Which do you want (people vary a lot)?
- Think about what you envision doing and then put yourself and your research group in the proposed space

Questions to Ask

Space may be “start-up” with the potential to expand when your group expands (it may also not be expandable)

- Ask if additional space will be possible when your group reaches critical mass
- Ask if “shared” space is feasible when you expand beyond current assigned space

Questions to Ask

- Does your teaching assignment matter to you?
 - Within what limits?
 - What courses would you like to teach?
 - What would you be willing to teach?
- Will you have a teaching “break” as you start your research program? How long?
- Will you have TA support?

Salary

SALARY SCALES VARY A LOT BY DISCIPLINE

How do you know if the salary is in the appropriate range?

- Hard to get salary figures from privates
- Can get national “averages,” but may not be informative
- Talk with faculty in your department to get a sense of the starting range in your field
- Think about what you need to live with some level of comfort in the community
 - Salaries vary considerably depending on local cost-of-living

Can I Ask for More?

Salary is the most sensitive of the issues in some ways

- The department wants you to come, so they’ll work hard to offer a good salary
- Your salary impacts the salary ladder in the department/school/institution
- Providing a salary higher than previously hired assistant professors (or worse still, associate professors/professors) creates long-standing resentments and problems
- If you ask for more, do it with good information and no expectations

State vs. Private Institutions

- State institutions have greater “rule-based” limitations
 - Salary grades may be set and harder to negotiate
 - Less flexibility in fund management
- Private institutions are generally smaller
 - Stepping out of “salary lineup” has greater consequences

Appointment Terms

Initial term of appointment is set by institutional policies

- 3 year, 4 year with renewal is common
 - Renewal is determined by a review process
- Tenure decision at 6-8 years is common
 - Tenure is determined by internal/external review process
- Definition of academic year/summer also may vary with institutions

When to Talk About Start-up

- You can inquire generally about research start-up during the interview process.
- If a faculty member (or the Chair) asks you about equipment needs, answer them clearly and concisely
- If the Chair initiates a discussion of start-up needs, provide detailed and clear information, keeping the option to give more information later
- Ascertain whether the information sought is for equipment/supplies (usual) or everything

Form of Information

- If the request is verbal, provide verbal answers and inquire if more detailed information would be useful
- If more detailed information is requested, give written information
 - Excel sheet is easy to manage (can give hard copy and also send via email)
 - **Make sure that all information is correct and pricing is current**

- Use catalog prices or quotations

When the Chair/Dean Asks...

- Provide them with precisely what they request
- If you feel that they have not requested a critical piece of information, inquire if they would like that information
- Provide the information promptly and with as much detail as possible

Negotiating: Use the Chair as Advocate

If the department wishes to make an offer, they want *you*

- Identify aspects of the offer that do not work for you and *talk with the Chair*
- Provide alternative avenues
 - Example: If you need specific equipment that won't fit into the "package," identify where shared equipment might work for you and ask for the Chair/Dean to arrange appropriate access

Negotiating with the Chair

- Generally happens on second visit
 - Best done face-to-face
- Think through what you truly want/need
 - Remember the Chair is also learning in this process
- Ask with respect but clarity
- Recognize that the answer may be "no" but it may be "yes"
- Use tact and try not to blatantly pit offers against one another — but if something really matters to you, say so carefully

Remember... *a balancing act*

- The department/institution has limits and multiple demands on resources
 - They want you at the lowest cost
 - But they also want you to succeed
- It is therefore important to ask for *what you need*
- You may not get what you ask, and then you have to decide, which is why thinking ahead is important

Don't Keep Them Waiting

- Once you have been asked for information or a decision, provide it promptly
- Don't shortchange yourself, but don't take advantage
- Don't play games
 - Be smart, be clear, but don't try to 'fake them out' in some way
 - Remember you will, if successful, be colleagues with the folks with whom you are negotiating

Questions to Answer (or not...)

- Where are you interviewing?
 - You can tell them, or you can simply say that you have several interviews in X time frame (which can be helpful)
 - Be clear that if someone wants to know, they can search your name and find the seminar schedules elsewhere
- Do you have other offers/second interviews?
 - Do what feels most comfortable to you, but knowing that you have options may be helpful in getting an offer

Two Body Issue

- When to raise issue of “two bodies”?
 - Definitely when you are being made an offer and terms are under discussion
 - Helpful to let Chair know at some point in the process where the discussion is more serious
 - During the interview process — gives lots of time to find potential placement but may dissuade
 - No “right” answer – you have to judge the person with whom you are dealing. Listen to your “gut”
- **Reality – the sooner this situation is known, the greater possibility for partner placement**

When to Respond to an Offer

- If you know your response, respond to the offer as quickly as possible
- If you need longer to give an answer, formulate a response quickly (within a day) that conveys your interest and your need for time
- Non-responsiveness will be interpreted, perhaps erroneously

What Happens...

If I get an offer, but it's not really the one I want

- If you are interested in another place and have been interviewed (or have an interview scheduled), let that Chair know that you have this offer and your deadline. Let the offering department know that you need time to make a decision.
- If you have no other prospects, you'll have to decide whether to take it or wait

Remember...

- You are unique, what you need is unique
- The institution will have a limited set of resources spread in different places
- Together you have to find the best mutual path forward — don't forget the nature of the colleagues and the environment for your work and teaching in the equation
- Be professional but strategic (don't play games) — you want to leave a good impression everywhere you interview

A Cautionary Note

- Search processes are *very* expensive for departments — time, effort, resources
- Once you have an offer, make a decision as expeditiously as possible
 - Don't drag out the decision process, but take the time you need
- Be careful how you use an offer with other institutions
 - Faculty have long memories — and it is a very small world

Think Positively...

...and do your homework!!

GOOD LUCK IN YOUR SEARCH!!

ANY QUESTIONS?

Promotion and tenure

Panel discussion presented by Jennifer West and Kathy Matthews at the 2011 NSF ADVANCE Workshop: Negotiating the Ideal Faculty Position, A Workshop for Underrepresented PhDs and Postdocs in Science, Engineering and Psychology September 18-20, 2010

Goals

- Institution
 - Tenure is a life-long commitment by the university to you
 - Successful faculty – innovators, leaders, producers
 - Research objectives need to align with institutional directions
- You
 - Faculty position that meets your own research and career objectives
 - Member of functional, innovative and forward-looking department and institution
 - Security offered by tenure

What can I do now?

Think about your steps all along the way

- Consistently evaluate your own progress
 - Goals
 - Mechanisms to get there
 - Ways to learn from others and engage them
- Keep data on all your activities
- Ask for feedback
 - Grant writing
 - Papers

- Teaching
- Research program organization and development

Note: This process is the accumulation of years of effort

Note: THINK AHEAD!!

Understand the General Process

- Learn about the promotion and tenure process at your institution
 - Ask about the process at every stage if you have questions
- Request a copy of the policy
 - Be sure when you are interviewing that the policy is consistent with your personal goals
- Understand the balance of teaching, research, and service that the institution AND the department will expect
- Understand the audience(s) for the materials

General Process — The Dossier

Dossier

- Summary of your independent career at institution
- Information on all aspects of your career
 - Research summary (publications, grants, citations, awards)
 - Teaching summary (courses, evaluations, awards)
 - Service summary (activities, awards)

- Inside reviews/letters
- Outside letters – *very important*
 - Writers identified by department
 - Also usually writers identified by individual

Dossier Components

- CV as summary of career
 - Education
 - Honors
 - Teaching/advising/mentoring
 - Citations
 - Grants
 - Publications
 - Research/teaching summary written by candidate
- Outside letters

What Happens After Dossier Is Prepared?

- Department review
 - Tenured faculty generally involved in decision to recommend or deny tenure
 - Department chair writes letter
 - Some schools have subcommittee
- School review
 - Often school-level committee reviews and makes recommendation to dean
 - Dean makes recommendation
- Promotion/Tenure Committee (Provost)

- Makes recommendation to President
- President sometimes makes final decision

What Happens After Dossier Is Prepared?

- Department review
- School review
- Promotion/Tenure Committee (Provost)
- President may make final decision

Note: Multiple levels of review — no one person makes the decision!
Many voices are part of the process.

General Process

- Understand the timing of preparing the dossier, what you should submit *and* when
 - Think carefully about names for Outside Letters
- Understand the process completely
- Don't wait until the last minute to prepare your materials
 - Think about your research/teaching summary
 - Ensure that your papers are submitted in a timely way
- Ask QUESTIONS if you do not understand

Outside letters

- Highly influential in decision process
- May have opportunity to suggest names

- Develop relationships - create a network – MARKET yourself!
- Post-decision: Ask about possibility for feedback from the letters (can be useful)

Note: Anticipate whom you would want to write letters and get to know those individuals

Factors Considered

- Research
- Teaching
- Service

These factors combine to reach a decision, BUT the specific combination varies widely across institutions

Research

Publications

- Used to assess your productivity
 - Numbers vary widely among disciplines
 - Type of publications expected also vary widely
 - Different expectations at different promotion points
- Used to assess the quality of work produced
- Citations, H-factor, Impact on the field
- Demonstrate your contributions
- Provide evidence of your unique contributions, particularly in collaborative/cross-disciplinary activities
 - Issues of collaborators

- How many? How much of your time?
- Issues of cross-disciplinarity
 - Why did this matter? What did you and your discipline contribute?
- Grants — important national review of work
 - Demonstrate ability to secure funding for research
- Presentations
 - Invitations reflect status in the field
- Visibility/Engagement/Focus
 - Present at multiple conferences
 - Engage the leaders at those conferences
 - Invite leaders to your institution via department events
 - Reflect on level of focus in work and, if broad, engage multiple communities

Teaching

- Effectiveness
 - Often evaluated by students
 - Ask assigned or selected mentor to provide review
- Innovation
 - Think about ways to do it better/more effectively
 - Engage students
- Range/breadth
 - Assignments may be focused or broad

- Be prepared to teach beyond your comfort zone
- Enthusiasm
 - Convey why you love what you do
 - *Occasionally* volunteer for something extra
- Develop a portfolio of your teaching
 - Syllabi
 - Handouts, other notes on courses developed
 - Problem sets
 - Other written materials
 - Computer-based materials, notes on courseware
 - Copies of software developed for courses
 - Examinations
 - Copies of graded papers where there is a significant writing component
 - Evaluation by a colleague
 - Student evaluations

Service

- Department
 - Help your department accomplish the faculty's goals
- University
 - Engage in the broad community, but wisely — most P/T committees are broad
- National Organizations
 - Choose wisely for visibility with minimum time
- Civic/K12/Outreach Opportunities

- Choose wisely, but make a difference

Keeping a Complete Record

Keep your CV up to date

- Include students mentored at all levels (primary and secondary mentoring)
 - Undergraduates
 - Graduate Students
 - Post-doctoral Associates
- Include advising responsibilities at all levels
- Refereed publications
 - Some institutions request an evaluation of % effort on each
 - Citations — check your “h-factor”
- Abstracts/Conference Proceedings/Presentations
 - Seminars/Workshops/Panels/etc.
 - Posters
 - Invited talks at meetings
- Service within university, in community, at (inter)national level

P/T *versus* Performance Reviews

Ask your institution about frequency and nature of performance reviews

- Can be very helpful in guiding activities
- Opportunity for mid-term feedback
- Provide an internal view of accomplishments
 - Some may have external letters
 - Dossier can be similar to promotion dossier

Are there answers to my questions?

- How many publications do I need?
- How much grant funding?
- How many graduate students? Postdocs?
- How many committees? Which ones?
- How good must my teaching be? Does it matter?
- How do I know if I'm doing enough?

There are no “right” answers to these questions, because the process is a composite of all of these and varies from place to place:

Note:FIND OUT WHAT YOU CAN ABOUT YOUR INSTITUTION -
ASK QUESTIONS!!!

Questions?

Ask many, ask often...

How to obtain funding

Panel discussion presented by Rob Rafael at the 2011 NSF ADVANCE Workshop: Negotiating the Ideal Faculty Position, A Workshop for Underrepresented PhDs and Postdocs in Science, Engineering and Psychology September 18-20, 2010

Funding Is Critical

- Must be prepared to work hard to garner funding
- Need more than a great idea, though that is a crucial element
- Need to understand the logistics and the process
- Need to submit more than one grant, so need multiple ideas
- Be creative
- Read deeply and broadly
- Talk to lots of people about research
- Think about doing more than one project
 - When one is difficult, the other may succeed
 - Increases funding opportunities
 - Promotes synergy in thinking
 - Enhances visibility
- What are the sources available to you?
 - Federal (NSF, NIH, DARPA, DOE, NIST, ONR, among many others)
 - State
 - Private foundations / not-for-profit organizations
 - Industry
- Use the web to retrieve information for each source
 - Some more detailed, others more obscure

Find Out About Resources

- Talk to your advisor, faculty in your department about resources in your area of research and in your institution
- Use the internet
 - Search for information on organization, what it supports to determine whether to target for funding
 - Search for deadline dates and invitations to apply in a given area
 - Search services such as IRIS <http://iris.library.uiuc.edu/~iris/alert/>
- Government agencies have detailed pages
 - Easy to get lost
 - Ask for help
- GrantsNet (<http://www.grantsnet.org>) from AAAS has good links
- Grant Writing (many now available)
 - *Proposal Writer's Guide* (Thackery)
 - *Research Proposals: A Guide to Success* (Ogden and Goldberg)

Get To Know Funders

- How are proposals reviewed?
- What is the timing?
- What do they support?
 - How can you target your research appropriately?
- Is there someone you know associated with the funding agency?
 - Talk to them!
 - Go to DC and talk to them!

Reasons to Talk to Program Folks

- If you have great, but risky ideas, talk with the program officer to see how best to present them

- Ask what a reasonable budget range would be
- Ask about the role of collaborators in your area of research

How to Approach an Agency

- Options for contact
 - Go in person or make a phone call
 - Find an agency person at a national meeting (they often attend to get to know their grantees)
- Be prepared and take as little of their time as possible while getting your message across
- Introduce yourself as a new independent researcher with some general information about yourself
- Have a specific question (or two) and ask if they have any specific advice

Understand the Submission Process

Find the resources from your institution that support grant submission

- Federal agencies may differ from foundations
- Get to know what they can do to help you identify the appropriate agency
- Get to know what they can do to help you with the process
- Understand the timeline and plan accordingly

Get Organized

- Find and read resources that help with grant preparation
- Ask senior colleagues if they will read your proposal and provide feedback
- Ask successful colleagues if you can read their grant
- Try to get onto a review panel (it will change your views!!!)

- Think deeply about your project — be innovative and creative in tackling a significant problem
- Identify the potential sources
 - Find the due dates (both agency and internal!)
 - Determine which applications to pursue
 - Develop your timeline for thinking, writing, rewriting, writing/rewriting, writing/rewriting, etc., final proofreading (critical!) — find out about institutional deadlines you *must* meet!!
- Be sure that you get feedback from colleagues before submission
 - Include plenty of time for this step in your timeline
 - Provides key perspective/input

Proposal Elements

Budget — know deadlines in your institution! Get help, if needed!

- Carefully crafted to align with anticipated funding from target
- Must be approved by department, dean, institution
- Can sometimes be sent through institutional process before the full grant
- Get feedback from experienced grant writers!

Budget Elements

- Salaries (PI, students, technical help) + Fringe benefits
- Equipment
- Supplies
- Travel
- Other (e.g., publication expenses)
- Subcontracts
- Indirect costs – F&A costs (facilities and administration, negotiated by institution)
- Fringe benefits and F &A costs set by institution

Proposal Elements

- Research plan (usually in a specified order) — other items may be requested
 - Hypotheses/specific goals
 - Significance
 - Background
 - Prior results of relevance/preliminary data
 - Include collaborators if you need their expertise
 - Experimental plan
 - Timeline
- No types, clear headers, some white space, use figures/tables
- Clear flow from hypotheses to experiments to concluding section
- Follow agency format precisely
- Include, where permissible, preliminary data/figures

Other Documents

- Different agencies require different types of documentation
- Read instructions very, very carefully and produce proposal accordingly
 - How to organize proposal
 - How to submit
 - What is allowed, not allowed
 - Criteria for review

Reviewer Issues

- Don't assume reviewer will be an expert in your specific area
 - Give appropriate background, with proper referencing for the experts
 - Create a cohesive, interesting “story”

- If you are responding to a review (e.g., NIH, NSF and others allow resubmission), formulate your response in affirming and polite tones, even if the reviewer was wrong

Research Plan

- Carefully present the importance of what you propose
- Leave no question that you can accomplish what you propose
 - Be sure to indicate alternate routes in case what you propose does not work
- Be very thorough in your citations (someone in the area will review it!)

Proposal Elements

- “Broader impacts”
 - NSF specifically requires that a proposal include activities that address the engagement of society with science
 - Proposed activities vary widely
 - Discuss with your institution what others have done that has been successful
- Other agencies are beginning to request information on activities beyond the research plan (e.g., NIH and postdoctoral training)

How Much Is Too Much?

Think carefully about what you can reasonably do in the time frame of the grant

- Don’t assume everything will work the first time (or even that it will work)
- Don’t try to do more than you honestly feel is possible

- Be aware that reviewers will probably know better about timing than you - get advice!

Good Advice*

- Calm down
- Understand the situation
- Communicate clearly

"“This set of advice is good to repeat to yourself at intervals, and it is sometimes hard to do any, much less all, of these!”" "*From We Were Soldiers"

What “Voice”?

- Using first person can seem arrogant when read, but if you use it, be sure to use “we” unless you did all the work yourself
- Write a few paragraphs in the first person and then read them; try them in a different voice and read them
- Choose what fits you

Criteria for Review

- Criteria vary with agency, so need to read instructions carefully
- Examples of criteria (not exhaustive):
 - Intellectual merit / quality of proposed work
 - Innovation
 - Creativity of original concepts
 - Well-conceived and organized activities
 - Investigator qualifications
 - Institutional context/access to resources
 - Broader impacts
- Criteria used can vary depending on the type of grant
 - Research

- Training
- Small business innovation (e.g., SBIR)
- *Always* read the instructions, which almost always provide information on criteria for review

Collaborating

Assess how collaborative funding is viewed in your department and your institution

- Can be viewed positively
- Can be viewed negatively
- But remember you must have independent funding as a junior investigator for the P & T process

Ways to Prepare

- Find publications on grant writing
- Ask to see successful proposal submitted by your colleagues
- Find out if your institution offers any grant-writing or grant draft-feedback activities (e.g., a mock review panel for your proposal)

Foundations

- Proposal processes are highly idiosyncratic, so you have to know the requirements - quite individual
- Foundations
 - National examples – sometimes nominations are by institution
 - Packard, Searle, Keck, Pew
 - Often have local foundations that should be explored
 - Funding very economy-dependent

Corporations

- Contracts negotiated through institutional research office
- Elements often negotiated (institutions normally try to charge F & A costs at some level)
- Terms and amounts vary significantly
- Ask about industry support at your institution or institution-of-interest if this type of support is important in your area

When You Are Funded

- Be aware that the funds go to the institution for your use
- Be fiscally responsible and keep up with your funding (learn how to read the budget monthly)
- Be sure your students and staff are aware of costs and exercise good judgment in ordering

Don't Let Funding Consume You

- Publish!!!
- Collaborate when possible
 - Shared techniques/approaches/new ideas
- Discuss your ideas
- Read
- Be brave
- Be prepared to fail!
- And then write the next grant.....

Enjoy The Process!

- You can do the research that you love and *choose* the students and collaborators with whom you will work!
- Be sure that you include relaxation in your planning and put thought into how to balance your work/life along the way! It can be great fun!

Building your research group

Keynote talk presented by Jane Grande-Allen at the 2011 NSF ADVANCE Workshop: Negotiating the Ideal Faculty Position, A Workshop for Underrepresented PhDs and Postdocs in Science, Engineering and Psychology September 18-20, 2010

General Thoughts

- The goal of your research program is to gain tenure and to establish a strong reputation
 - Do the things that support this goal
 - Do NOT do things that interfere with this goal
- How you set up your research group will follow you and will help determine your success
- Worry about results, funding, and people!

Research Group Elements

- People
 - Undergraduates
 - Graduate students
 - Postdocs
 - Technical support staff
- Space
 - Place for people, equipment, materials and supplies

Motivating Your Group

- Find students who will work hard
- Find ways to avoid or dismiss students who will not work hard or are disruptive or dishonest
- Support your students and ensure their own learning process

- Provide guidance
- Provide feedback on their work and on their writing

People

- Technical staff
 - Have clear job description
 - Ask a colleague to help in interviews
 - Are technical staff the best use of resources?
- Postdocs
 - Does department have prejudice for/against postdocs? Favor graduate students?
 - How difficult is it to recruit postdocs?
 - Are there university resources for postdocs?
- Graduate Students
 - What are departmental expectations for number of graduate students per year?
 - Will the graduate students also be expected to be TAs?
 - What are the processes for evaluation and advancement to candidacy for graduate students?
- Undergraduate research students
 - How many can you reasonably manage?
 - What are the departmental expectations for undergraduate research mentoring?
 - How do you strike the balance?
 - Using graduate students/postdocs as in-lab mentors for undergraduates can be a very successful strategy

Keeping Up

- Have regular meetings with each member of your laboratory
 - Be aware of what they are doing
 - If they need assistance, figure out the best way to guide them forward
- Have lab members write regular reports that can form the basis for publications
 - Use an outline to plan publication
 - Sketch figures/tables
 - Easy way to see what they are thinking and provide feedback

Personnel Management

- Establish a positive “lab culture”
- Have regular lab meetings to discuss research and look at papers in your area
- Be proactive in addressing personnel conflicts (or potential conflicts)
 - Get help if you need it
 - No one wants a caustic/poisonous lab environment
- Lead by example

Create Clear Expectations

- Consider a “compact” document that outlines your expectations that you review with students and that they sign
 - Include information on backups for data/computers, books, chemicals, code, coursework, FAX use, funding, human subjects, lab duties, lab safety officer, new member orientation, use of equipment, website
- Provide clear guidance on

- Lab notebooks
- Literature coverage (shared in lab meetings)
- Attendance at meetings
- General comportment
- Publications
 - Orders of authors/responsibilities
- Engagement in manuscript review/grant review
- Safety issues and procedures
- Security of the lab and its people
- Software policies
- Travel expectations
 - How often/who will fund/who must present
- Vacations
- Progress reports
- Work hours

Recruiting Graduate Students

- Volunteer to serve on the admissions committee
- Teach classes geared for graduate students
- Mentor graduate students as they enter the department

Non-experimental Space

- Be sure that your office is placed in the relationship you desire with respect to your group members
 - Some like it close
 - Some like it far away
- Arrange your office to support your style of working
- Embrace your independence

- From your mentors/advisors
- In some disciplines, the work you are judged on is independent of your group's work!

Physical Space

- Moving into existing space
 - Proximity to colleagues
 - Access to department/university equipment
 - Proper utilities for equipment
 - Electrical, air, vacuum, water
 - Hoods
 - Chemical, tissue culture
 - Air handling
 - Vibration issues, flow issues, etc.
 - Office space for students/postdocs
 - Separate or within lab?
- Rennovating space
 - Negotiate for a tenure clock extension, if your delay is >4-6 months
 - Same issues apply as for existing space, but you have some choices!
 - Think carefully about what you need for your work
 - Electrical, clean power, ventilation, hoods, plumbing, chilled water, air flow from the HVAC system, *everything*

- Do careful research about what you need
 - Contact vendors for equipment specifications and problems identified at other institutions
 - Ask colleagues about problems encountered at your institution
- Learn from others about renovations
- Work with the architects/contractor to get your project within the assigned cost range
- Be *actively* involved in every state of the process – follow process regularly
- Ensure that what you need is being taken into account, especially completion date
- Be prepared for delays
 - Write grants or papers, prepare for teaching
- Organize how you will move in
- Think about what you will do and in what order
- Ask for space to work temporarily if there are things that can get you going
- Take the time to engage your colleagues and learn more about the department

Equipment

- Seek possible discounts
- Negotiate with multiple vendors for the best price
- Allow sufficient lead time for items that are complex (1-6 months for large equipment)

Supplies

- Talk with multiple vendors (bulk discounts from some with large orders)
- Package as much as possible with each individual vendor for best price

- Consider larger quantities of items that “keep” and that you know you will need
 - Biggest discount you’ll ever get!
 - Think about storage strategies

Continually Think

- Keep reflecting how things are working (arrangement of space, interactions among lab members)
- Take steps to make changes that would make a difference
- Be sure to think about your joy in the work and the ways you can inspire your team!